### 2021 SPRING WILD TURKEY HARVEST

### **ACTIVITY**:

In 2021, Delaware's spring turkey hunting season ran from 10 April to 8 May, with a youth/non-ambulatory hunt day on 3 April. Only bearded birds may be legally harvested. Private land hunters were allowed to hunt all 25 days of the season; public land hunters were selected through a preseason lottery to hunt one of four, week-long season segments (A, B, C, & D) during the same 25-day period (no Sunday hunting). Mandatory check stations were established to collect biological information from all harvested birds. However, due to COVID-19, these check stations needed to be modified to follow social distancing practices. Therefore, the Division enacted a self-check option with reduced data collection.

### **REMARKS**:

In 2021, 612 Wild Turkeys, (*Meleagris gallopavo*) were reported harvested, down 31 birds from the 2019 season (n = 643; Figure 1.1). For the purposes of harvest reporting, Delaware is divided into 4 management regions, comprised of 18 wildlife management zones (Figure 1.2). Similar to the 2020 season, all regions fell in the same order with the Interior region having the highest harvest. The Interior region (i.e., Zones 2, 4, 6 – 8, and 10) accounted for 48.0% (n = 294) of the total harvest. The Southern region (i.e., Zones 11 – 17) harvested the next greatest proportion of birds (37.9%; n = 232). This was followed by the Bayshore region (i.e., Zones 3, 5, and 9) and consisted of 11.9% (n = 73) of the state's harvest. Lastly, the northern region (i.e., Zones 1A and 1B) harvested, 2.1% (n = 13) of the total state harvest. No birds were harvested from unknown locations due to data collection errors when the hunter registered the turkey. Across regions, the harvest level was lower than last year. Reported harvest was greatest in wildlife management Zone 6, which accounted for 14.2% (n = 87) of the total harvest (Figure 1.3)

Most harvested birds were taken from private lands (81.5%, n = 499). The harvest of 113 (18.5%) turkeys on public lands is a record high for both number and percent share of harvested wild turkey vs. private lands. The top four public lands for harvesting a Wild Turkey, in 2021 were: Redden State Forest (n = 19, 16.8%), Blackbird State Forest (n = 12, 10.6%), Norman G. Wilder Wildlife Area (n = 12, 10.6%), and Midlands Wildlife Area (n = 9, 8.0%). There was a tie for 5<sup>th</sup> place between Milford Neck Wildlife Area (n = 8, 7.1%) and C & D Canal Wildlife Area (n = 8, 7.1% Table 1.1).

During Delaware's annual youth/non-ambulatory turkey hunt, 25 birds were harvested and was the greatest harvest to date. This is down 16.6% from the previous seasons 30 bird record high. Of the 25 turkeys harvested in 2021, 48.0% (n = 12) were harvested on public lands. By week during the regular season, 43.5% (n = 266) of the total birds harvested were taken in Week 1; 21.2% (n = 130) in Week 2; 16.2% (n = 99) in Week 3; and 15.0% (n = 92) in Week 4 (Figure 1.4). This suggests an increasingly higher harvest early in the turkey season vs. later.

Adult birds comprised 80.1% (n = 494) of the harvest, but the Division is not confident in the accuracy of these data as the division required hunters to self-check birds at check stations. Turkey hunters were not always consistent with their classification of adult vs. juvenile based on categorical morphometric data.

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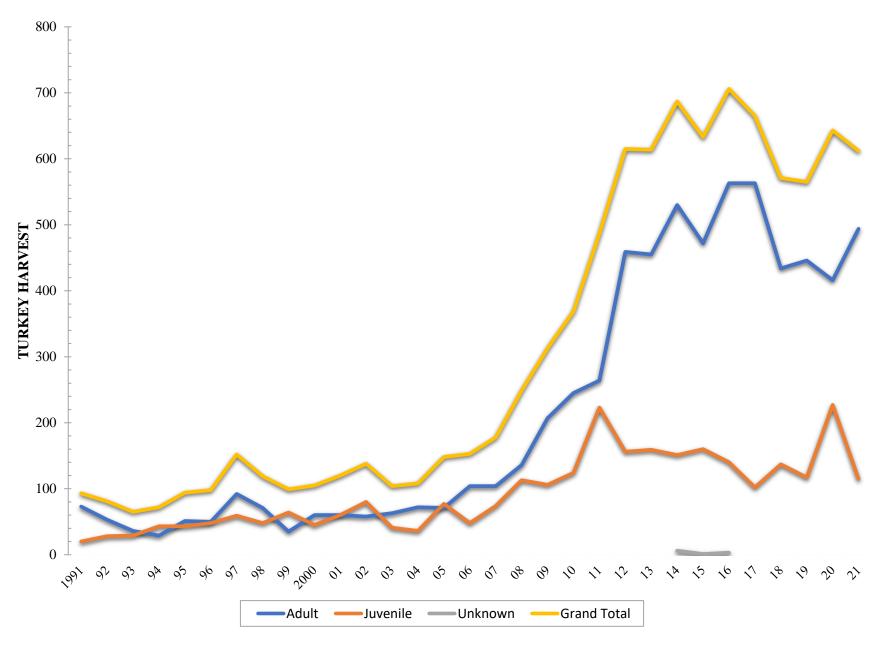


Figure 1.1. Annual harvest of Eastern Wild Turkeys (*Meleagris gallopavo*) in Delaware from 1991 – 2021 classified by age groups (i.e., adult, juvenile, and unknown).

Table 1.1. Wild Turkey (*Meleagris gallopavo*) harvest distribution among DNREC Division of Fish and Wildlife and Department of Agriculture Forest Service owned public lands hunted during the 2021 Delaware spring turkey season. Public lands harvest data from 2016 – 2020 are also displayed.

<b>Public Land Hunting Areas</b>	2014	2015	2016	2017	2018	2019	2020	2021
Assawoman Wildlife Area (WA)	2	2	2	2	3	2	5	3
Augustine WA	0	0	1	0	1	0	3	1
Blackiston WA	6	4	4	6	7	4	9	6
C & D Canal WA	7	6	7	3	7	8	9	8
Cedar Swamp WA	2	3	5	4	3	4	3	3
Eagles Nest WA	2	2	1	3	2	3	4	5
Industrial Forest WA – Barr & Laurel	1	3	3	1	1	2	3	0
Little Creek WA	6	7	3	8	5	2	2	5
Marshy Hope WA	1	2	2	4	3	2	4	3
Midlands WA	5	5	5	11	8	4	4	9
Milford Neck WA	1	2	5	4	4	5	4	8
Nanticoke WA	1	1	2	3	2	1	3	5
Norman G. Wilder WA	12	9	12	12	10	11	6	12
Old Furnace WA	3	1	3	3	5	1	5	3
Prime Hook WA	0	0	0	1	0	1	0	1
Tappahanna WA	2	2	3	6	4	3	3	4
Ted Harvey Conservation Area	1	1	1	4	3	2	6	1
Woodland Beach WA	3	3	0	0	3	3	2	2
Blackbird State Forest	2	0	8	9	8	7	7	12
Redden State Forest	23	12	21	22	15	12	21	19
Taber State Forest	3	1	0	1	1	4	2	2
Total	83	66	88	106	95	81	106	112

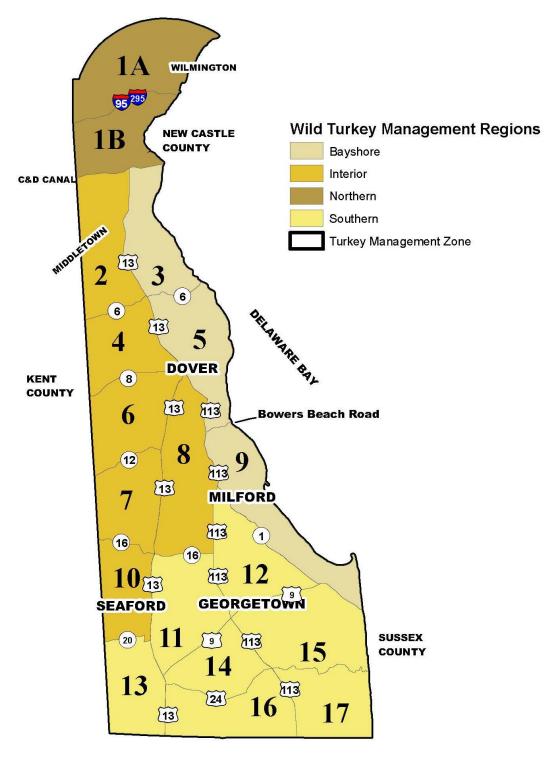


Figure 1.2. Wild Turkey (*Meleagris gallopavo*) management regions (Bayshore [tan], Interior [amber], Northern [light brown], and Southern [yellow]) and associated management zones (1A, 1B, and 2-17) in Delaware.

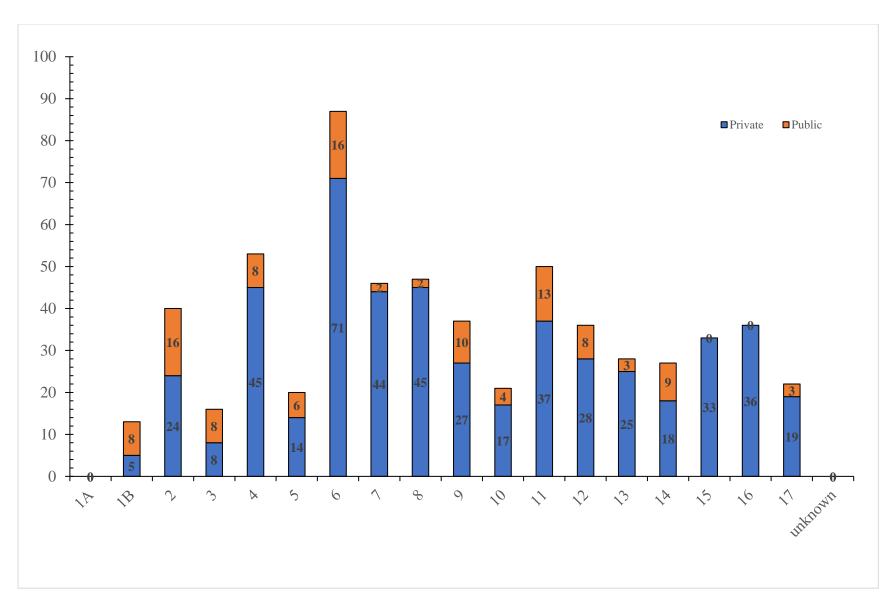


Figure 1.3. Spring 2021 Delaware Wild Turkey (Meleagris gallopavo) harvest on public and private lands by hunting zone.

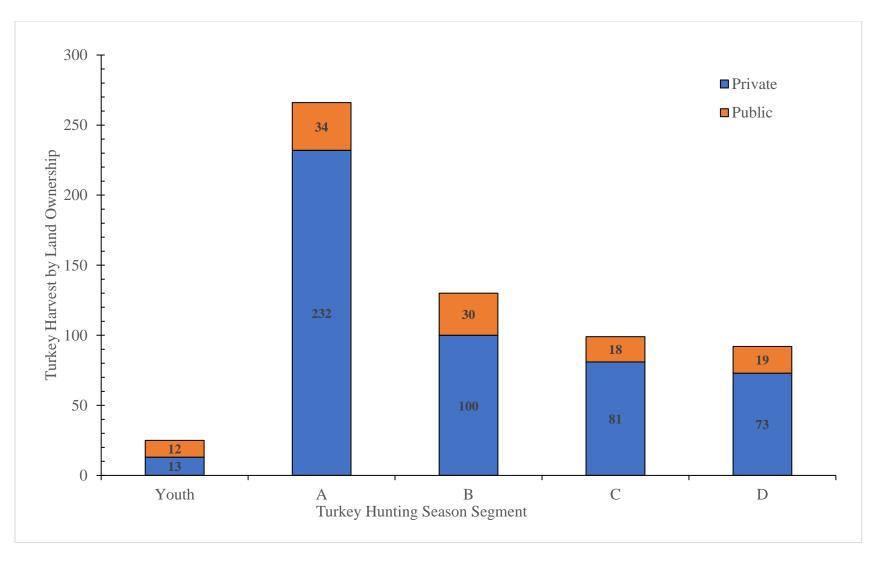


Figure 1.4. Spring 2020 Wild Turkey (*Meleagris gallopavo*) harvest by week on public and private lands. Including youth (4 April), regular seasons (11 April – 9 May, 2020).

#### 2021 SUMMER TURKEY PRODUCTIVITY SURVEY

## **ACTIVITY:**

Since 2010, the Delaware Division of Fish and Wildlife has used a volunteer-based survey to record observations of Wild Turkeys across the state during the months of July and August. The primary purpose of this survey is to generate an index of annual turkey productivity and recruitment, expressed as the ratio of observed poults (young) per hen (adult female). In addition, data will be used to track the health and distribution of the turkey population, as well as, evaluate potential regional differences in reproductive success within Delaware.

Participants were asked to record observations of turkeys in the months of July and August during the course of their daily activities. Using a Division-provided data sheet, participants recorded the date and number of gobblers (adult male), hens, and poults seen during each observation (Figure 2.1). If the participant was unable to distinguish age/sex of the birds, they were recorded as "unknown." Effort was made to instruct observers to avoid documenting multiple encounters with the same flock or brood of birds during the survey period. Participants were also asked to record the Turkey Management Zone (TMZ) in which each encounter occurred; Delaware is divided into 18 TMZs (Figure 1.2).

# **REMARKS**:

As a result of low staff availability, the 2021 turkey productivity surveys were not conducted. With an increase in staff currently in place, we intend to resume productivity surveys in 2022.

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# **DELAWARE DIVISION OF FISH AND WILDLIFE**

# WILD TURKEY OBSERVATION SURVEY FORM

**SURVEY PERIOD: JULY 1 – AUGUST 31** 

OBSERVER INFORMATION	INSTRUCTIONS								
Name:	Each time you see turkeys, record the date, county, and number of adult hens, poults (young of the year), & adult gobblers. Record ALL turkeys seen, not just broods. Use additional								
Address:	sheets if necessary.								
	<ul> <li>Please record the turkey management zone in which your observation was made. REFER TO INCLUDED MAP.</li> </ul>								
	AVOID REPORTING DUPLICATE SIGHTINGS (e.g. if you see the same number of hens and poults in the same location several days in a row, only record once).								
Phone:	If you cannot determine sex or age, record them in "UNKNOWN" column – that information is still important.								
Email:	Either mail, fax, or email the survey by September 10 to: Matt DiBona, Delaware Division of Fish and Wildlife 6180 Hay Point Landing Road Smyrna, DE 19977 Fax: 302-653-6755 Email: Matthew.DiBona@state.de.us								
DATE COUNTY	TURKEY MGMT ZONE	NUMBER OF TURKEYS OBSERVED (Record ALL turkeys seen, not just broods)							
(month/day)	(refer to map)	HENS	POULTS	GOBBLERS	UNKNOWN				
		1							

Figure 2.1. Wild Turkey, *Meleagris gallopavo*, observation survey form during survey period of 1 July - 31 August 2022.